

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date  
29 September 2005 (29.09.2005)

PCT

(10) International Publication Number  
**WO 2005/090040 A1**

(51) International Patent Classification<sup>7</sup>: **B29B 17/02**,  
B07C 5/346, G01N 23/222, B03B 9/06, 13/06

Moscow, 123585 (RU). GORYACHEV, Igor V. [RU/RU];  
50 Peschanaja Street, Apt.50, Moscow, 125057 (RU).  
DMITRIEV, Sergei A. [RU/RU]; 2 Jaroslavskoe Road,  
Apt.240, Moscow, 129348 (RU). PEGAZ, David [IL/IL];  
1 E. Mohl Street, Apt. 14, 42540 Netanya (IL).

(21) International Application Number:  
**PCT/IL2005/000310**

(74) Agents: LUZZATTO, Kfir et al.; P.O. Box 5352, 84152  
Beer Sheva (IL).

(22) International Filing Date: 17 March 2005 (17.03.2005)

(81) Designated States (unless otherwise indicated, for every  
kind of national protection available): AE, AG, AL, AM,  
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,  
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,  
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,  
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,  
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,  
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ,  
TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA,  
ZM, ZW.

(25) Filing Language: English

(84) Designated States (unless otherwise indicated, for every  
kind of regional protection available): ARIPO (BW, GH,

(26) Publication Language: English

[Continued on next page]

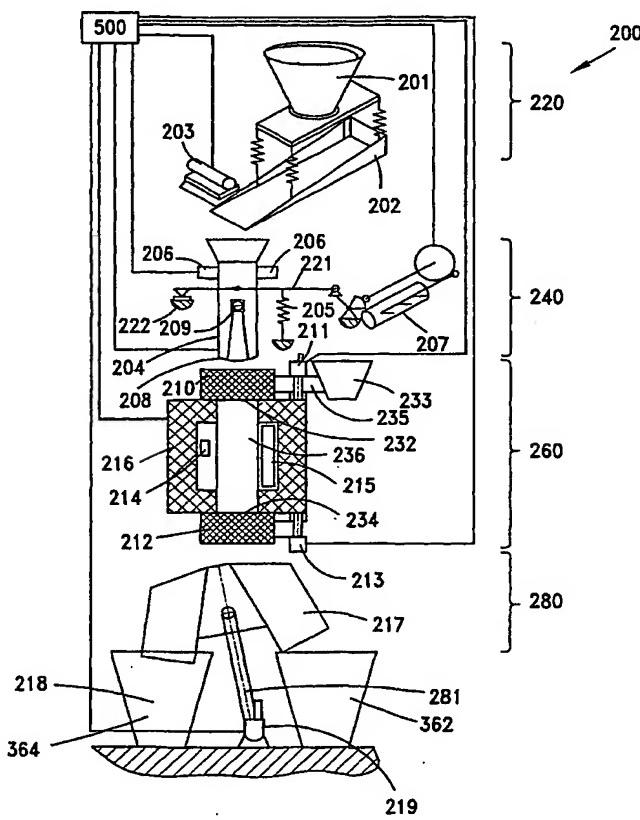
(30) Priority Data:  
161011 22 March 2004 (22.03.2004) IL

(71) Applicant (for all designated States except US): E.E.R.  
ENVIRONMENTAL ENERGY RESOURCES (ISRAEL) LTD. [IL/IL]; 12 Hachilazon Street, 52522  
Ramat-Gan (IL).

(72) Inventors; and

(75) Inventors/Applicants (for US only): GNEDENKO,  
Valeri G. [RU/RU]; 19 Berzarin Street, Bldg.1, Apt.201,

(54) Title: SYSTEM FOR CONTROLLING THE LEVEL OF POTENTIAL POLLUTANTS IN A WASTE TREATMENT PLANT



(57) Abstract: The invention is an apparatus and method for on-line sorting of waste matter, at the entrance to a waste processing plant, according to the level of specific chemicals, typically chlorine detected therein. The apparatus comprises a waste matter inlet that provides waste matter to a weighing module, preferably until a preset limit is reached. Then, this control volume of waste is introduced into a pulsed neutron material analyzer that is optimized for the determination of the content of the specific chemical in the control volume. A control means such as a computer then decides whether the level of the chemical in the waste control volume is above or below a preset threshold, and accordingly channels the waste into one or another of two channels. One of these channels accepts waste with low content of the given chemical, for introduction into the waste processing chamber. The other channel stores the waste until, for example, it may be mixed with other waste having a sufficient low content such that the overall amount of the chemical is still below the threshold value.

WO 2005/090040 A1



GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

**Published:**

— with international search report

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*